

Medical specialty distribution in China, 2009–17: a longitudinal examination

Angela P Fan, Russell O Kosik, Lihong Fan, Xudong Zhao, Yunung Hsu, Selina S Lien, Dan Li, Yuanpeng Ren, Baisheng Jiang, Qi Chen

Abstract

Background China's practitioners are responsible for serving the most populous country in the world. Despite the pronounced shortages of areas, such as general practice and paediatrics, little is known about the discrepancies between supply and demand in each specialty. We aimed to examine China's supply of and demand for health care since 2009 to gain an understanding of the progress that reforms have brought about.

Methods We analysed distribution data regarding licensed medical practitioners and patient visits for all clinical departments between 2009 and 2017 using annual reports and yearbooks provided by the Chinese National Health and Family Planning Commission, which are published by the government of China and the Peking Union Medical College. The institutional review board of the principal investigator's institution approved this study.

Findings From 2009 to 2017, the number of registered practicing physicians increased by 48·5%. Inpatient hospitalisations increased by 98·2%, and outpatient visits increased by 69·4%. Internal medicine had a 64·5% inpatient demand–supply gap in growth rate (DSG) and a 6·5% outpatient DSG. For all specialties, negative inpatient DSGs were found in general practice (–36·8%), preventive medicine (–30·5%), stomatology (–12·1%), and aesthetic medicine (–11·9%); negative outpatient DSG was only found in stomatology (–7·6%). General practice has –41·3% outpatient DSG at the hospital level, suggesting patients in need of general practice might no longer go to hospitals, instead favouring more convenient primary care near home.

Interpretation A major goal of China's 2009 reforms was to improve the quality of service during primary care visits. Although between 2009 and 2017 most of the departments' growth rates in physician quantity were slower than those of the patients', China's efforts to train more general practices at primary care institutions over this period has so far been an effective means of promoting equal access to health care.

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Contributors

APF is the principal investigator, designed the study, interpreted the results, and revised the manuscript. ROK interpreted the results and wrote the draft. LF interpreted the results and revised the manuscript. XZ assisted in the interpretation of the results and revision of the paper. YH assisted in the interpretation of the results and writing of the paper. SSL assisted in data acquisition and design concept. DL assisted in data acquisition and design concept. YR assisted in data acquisition and design concept. BJ assisted in data acquisition and design concept. QC assisted in data acquisition and design concept. All authors have read and approved the manuscript.

Declaration of interests

We declare no competing interests.

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School of Medicine, National Yang-Ming University, Taipei, Taiwan, China (A P Fan PhD, Y Hsu BA, S S Lien MPH); 10th People's Hospital (R O Kosik MD, L Fan MD, D Li MD), Tongji University School of Medicine (X Zhao MD), Shanghai, China; and Department of Nursing Humanity and Management (Y Ren PhD), School of Humanities and Social Sciences (B Jiang LLM), and School of Basic Medical Sciences (Q Chen MD), Nanjing Medical University, Nanjing, China

Correspondence to:
Dr Angela P Fan, School of Medicine, National Yang-Ming University, PO Box 22072 Taipei, Taiwan ROC100, China
fan_angela@hotmail.com